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Listing of Claims

1. (Amended) A method for production of curved thread-reinforced tubular structures composed of rubber layers and of strengthening layers, comprising the steps of:

applying a first rubber layer to a circumference of an essentially cylindrical mandrel ~~mandrels~~ driven forward in a feed direction (X) coinciding with the cylinder axis of the mandrel;

winding on a multiplicity of parallel reinforcing threads, having defined thread angles (α) with respect to ~~a feed axis~~ the feed direction, by means of a bobbin creel, to form a first thread ply, the mandrel ~~mandrels~~ being led through a rotating deflection element having and inner circumference with a diameter greater than the diameter of the mandrel, the inner circumference surrounding the mandrel ~~mandrels~~ and guiding the reinforcing threads ~~so as to~~ which are distributed ~~on~~ along the inner circumference;

applying a covering rubber layer, wherein

the mandrel is ~~mandrels are~~ led through the deflection element of the bobbin creel and the cylinder axis of the mandrel is offset with respect to the axis of rotation ~~eccentrically in the region~~ of the deflection element, the axis of rotation and the cylinder axis being parallel to each other.

2. (Amended) The method as claimed in claim 1, further comprising a preceding step of displacing a guide of the mandrel ~~mandrels~~ transversally to the feed direction (X) ~~about~~ to a position in which the cylinder axis of the mandrel is shifted with respect to ~~a concentric lead through of the mandrels through~~ the axis of rotation of the deflection

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element.

3. (Amended) The method as claimed in claim 1, further comprising a preceding step of displacing the deflection element, together with the bobbin creel, transversely to the feed direction (X) ~~from~~ to a position ~~shifted with respect to a concentric lead through of the mandrels through~~ in which the axis of rotation of the deflection element is shifted with respect to the cylinder axis of the mandrel.

4. The method as claimed in claim 1, wherein the applying the covering of the rubber layer is provided after ~~optionally~~ multiple execution of at least one of the applying a first rubber layer and the winding steps.

5. (Canceled

6. (Withdrawn) A device for the production of curved thread-reinforced tubular structures, comprising:

at least one bobbin creel which has a rotatable deflection element which surrounds mandrels being driven forward in a feed direction (X) and which guides reinforcing threads so as to be distributed on the inner circumference; and

adjustable guide means for leading the mandrel ~~mandrels~~ through the deflection element of the bobbin creel eccentrically in the region of the deflection element.

7. (Withdrawn) The device as claimed in claim 6, wherein the guide means cooperate with the bobbin creel in order to displace the bobbin creel transversely to the feed direction (X) about a position shifted with respect to the concentric lead through of the mandrel ~~mandrels~~ through the deflection element.

8. (Withdrawn) The device as claimed in claim 6, wherein an inside diameter of the deflection element is correspondingly larger than a diameter of the mandrel covered

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with at least one rubber layer.

9. (Amended) A method for production of curved thread-reinforced tubular structures, comprising the steps of:

leading at least one essentially cylindrical mandrel through a deflection element of a bobbin creel in a feed direction coinciding with the cylinder axis of the at least one mandrel, the deflection element having an inner circumference with a center axis offset from the cylinder axis of the at least one mandrel ~~a central longitudinal axis of the deflection element~~; and

winding a multiplicity of parallel reinforcing threads on the at least one mandrel as the mandrel is led through the deflection element resulting in defined thread angles (α) with respect to ~~a feed axis~~ the feed direction to form a tubular structure having a curvature.

10. (Amended) The method as claimed in claim 9, further comprising the steps of:

applying a rubber layer to a circumference of the at least one mandrel driven forward in [[a]] the feed direction (X); and

applying a covering rubber layer to the rubber layer.

11. (Canceled)

12. (Amended) The method as claimed in claim [[11]] 9, wherein the thread angles correspond directly to a distance of the inner circumference of the deflection element from the at least one mandrel so that when the at least one mandrel is led through the deflection element different thread angles are produced over a circumference of the at least one mandrel.

13. (Original) The method as claimed in claim 9, wherein the winding on a multiplicity

of parallel reinforcing threads forms a tubular structure which automatically undergoes a curvature after the multiplicity of parallel reinforcing threads are drawn off from the at least one mandrel.

14. (Original) The method as claimed in claim 13, further comprising vulcanizing the multiplicity of parallel reinforcing after it is drawn from the at least one mandrel.

15. (Amended) The method as claimed in claim 9, further comprising varying the offset ~~lead through of the at least one mandrel~~ of the cylinder axis with respect to the center axis at selected portions to define curvatures of a resultant tubular structure.

16. (Amended) The method as claimed in claim 15, further comprising varying the ~~lead through~~ position of the cylinder axis of the at least one mandrel at selected portions to be concentric with the center axis of the inner circumference of the deflection element.

17. The method as claimed in claim 9, wherein the ~~lead through of the at least one mandrel through the deflection element~~ offset of the center axis from the cylinder axis is provided by at least one of:
displacing guides of the at least one mandrel ~~mandrels~~ transversally to the feed direction ~~about~~ to a position where the cylinder axis of the at least one mandrel is shifted with respect to ~~a concentric lead through of the at least one mandrel through~~ center axis of the inner circumference of the deflection element; and

displacing the deflection element, together with the bobbin creel, transversely to the feed direction ~~from~~ to a position where the center axis is shifted with respect to the ~~concentric lead through~~ cylinder axis of the at least one mandrel ~~through the deflection element~~.

18. (Amended) The method as claimed in claim 9, wherein the at least one mandrel is advanced in a continuous process in a feed direction (X) through successively

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arranged extrusion devices.

19. (Amended) The method as claimed in claim 9, wherein the thread angles are dependent on a feed speed of the at least one mandrel and a gap between ~~an~~ the inner circumference of the deflection element and an adjacent outer circumference of the at least one mandrel.

20. (Amended) The method as claimed in claim 9, wherein:

a smaller gap between the ~~circumferential region~~ outer circumference of the at least one mandrel and the inner circumference of the deflection element results in smaller thread angles α_1;

a larger gap between the ~~circumferential region~~ outer circumference of the at least one mandrel and the inner circumference of the deflection element results in larger thread angles α_2; and

a small radius of the curvature is obtained in a region of the smaller thread angles α_1 and a large radius of the curvature is obtained in a region of the ~~large~~ larger thread angles α_2.

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CONCLUSION

For the foregoing reasons, Applicants respectfully submit that claims 1-4, 9, 10, and 12-20 are patentable.

No new subject matter was entered.

A speedy allowance would be appreciated.

Respectfully submitted,

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Langenscheidts New College German Dictionary

German-English
English-German

LANGENSCHEIDT
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Revised and enlarged editi

Vocabulary

Phraseology

Translations

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belt round the ears; 'don·nernd *adj.* thundering, roaring: thunderous *applause*: *~es Gelächter* roars of laughter; 'Don·ner·schlag *m* clap of thunder, thunderclap; *es traf ihn wie ein ~* it came like a bombshell (to him)

Don·ners·tag ['dɔnɐstaːk] *m* (-[e]s; -e) Thursday; *(am) ~* on Thursday; 'don·ners·tags *adv.* on Thursday(s)

'Don·ner|stim·me *f* thundering voice; *mit ~ brüllen* thunder; ~wet·ter F **I.** *n* (-s; -) **1.** *ein ~ ging auf ihn nieder* F he got a real roasting; *wenn er heimkommt, gibt (or setzt) es ein ~* F he'll be in for it when he gets home; **II.** *int.* **2.** F (well) blow me!, blimey!; **3.** *zum ~!* damn it!; *warum (wer etc.) zum ~?* sl. why (who etc.) the hell?

doof [doːf] F *adj.* stupid; boring; *dieses ~e Fenster schließt nicht richtig* I can't get this stupid window to shut properly; Doo·fi ['doːfi] F *m* (-s; -s) F dumbo

do·pen ['doːpən, 'dɔpən] (h) **I.** *v/t.* dope; **II.** *v/refl.*: *sich ~* take dope; Do·ping ['doːpɪŋ, 'dɔpɪŋ] *n* (-s; -s) doping; 'Do·ping·kon·trol·le *f* dope test

Dop·pel ['dɔpəl] *n* (-s; -) **1.** duplicate; **2.** *tennis etc.*: doubles *pl.*; doubles team; *gemischtes ~* mixed doubles *pl.*; ~ad·ler *m* double eagle; ~agent *m* double agent; ~b *n* ♪ double flat (sign); ~be·deu·tung *f* double meaning; ~be·la·stung *f* double load; ~be·le·gung *f* double occupancy; ~be·lich·tung *f* *phot.* double exposure; ~be·rei·fung *f* twin tyres (*Am.* tires) *pl.*; ~be·steue·rung *f* double taxation; ~bett *n* double bed; ~blind·ver·such *m* double-blind trial (*or* test); ~bo·den *m* false bottom

'dop·pel·bö·dig [-bøːdɪç] *fig. adj.* ambiguous; *~e Moral* double standards *pl.*; 'Dop·pel·bö·dig·keit *f* (-; *no pl.*) ambiguity; double standards *pl.*

'Dop·pel·decker [-dɛkɐ] (*sep.* -k·k-) *m* (-s; -) biplane; F double-decker

'dop·pel·deu·tig [-dɔʏtɪç] *adj.* ambiguous; suggestive; 'Dop·pel·deu·tig·keit *f* (-; -en) **1.** *no pl.* ambiguity; suggestiveness; **2.** ambiguous (*or* suggestive) remark

'Dop·pel|ehe *f* bigamy; *e-e ~ führen* have (*or* live with) two wives *or* husbands; ~er·folg *m* double victory (*or* success); ~feh·ler *m tennis*: double fault; ~fen·ster *n* double(-glazed) window; *pl. coll. a.* double glazing *sg.*; ~flin·te *f* double-barrel(l)ed gun; ~gän·ger [-gɛŋɐ] *m* (-s; -) double, lookalike; ~gan·ze *f* (-n; -n); ~ganz·no·te *f* ♪ breve; ~glei·sig [-glaɪzɪç] *adj.* → *zweigleisig*; ~griff *m* ♪ double stop

'Dop·pel·haus *n* pair of semis; ~hälf·te *f* semi-detached house, F semi

'Dop·pel|hoch·zeit *f* double wedding; ~kinn *n* double chin; ~klin·ge *f*: *Rasierer mit ~* twin-bladed razor; ~kon,zert *n* double concerto; ~kreuz *n* ♪ double sharp (sign); ~läu·fig *adj.* double-barrel(l)ed; ~laut *m ling.* diphthong; ~le·ben *n* double life; ~mo,ral *f* double standards *pl.*; ~mord *m* double murder; ~na·me *m* double-barrel(l)ed name; double name; ~packung (*sep.* -k·k-) *f* double pack; ~paß *m soccer*: one-two; ~por,trät *n* double portrait; ~punkt *m* colon; ~rahm·kä·se *m* full-fat cheese; ~rei·fen *m* twin tyre (*Am.* tire); ~rei·hig [-raɪɪç] *adj.* double-breasted; ~rol·le *f thea. and fig.* double role; ~sei·tig [-zaɪtɪç] **I.** *adj.* double-page *spread*; *textil.* reversible; ⚡ double; *~e Lungenentzündung* double pneumonia; **II.** *adv.* on both sides; → *gelähmt*; ~sieg *m* double victory

'Dop·pel·sinn *m* double meaning, ambiguity; 'dop·pel·sin·nig *adj.* ambiguous

'Dop·pel|spiel *fig. n* double dealing; *ein ~ mit j-m treiben* F double-cross s.o., two-time s.o.; ~spül·becken (*sep.* -k·k-) *n* double-bowl kitchen sink; ~staats·an·ge·hö·rig·keit *f* dual nationality; ~steck·do·se *f* ⚡ two-socket outlet; ~stecker (*sep.* -k·k-) *m* (-s; -) ⚡ double plug; two-way adapter; ~stöckig [-ʃtœkɪç] (*sep.* -k·k-) *adj.* two-stor(e)y ..., *pred.* two-storeyed, *Am.* two-storied; *motorway etc.*: two-tiered, two-tier ...; F *~er Whisky* double whisky; ~strich *m* ♪ double bar

dop·pelt ['dɔpəlt] **I.** *adj.* double (*a. whisky etc.*); *den ~en Preis* double the price; *~er Lohn* double-time payment; *~es Übel* twin evils; *et. ~ haben* have two (copies) of; → *Ausfertigung, Boden* 1, *Buchführung, Moral* 1, *Spiel* 1, *Staatsangehörigkeit*; **II.** *adv.* double; twice; *with adj.*: doubly; *~ sehen* see double; *~ schmerzlich* doubly painful; *~ so alt wie ich* twice my age; *~ so lang* twice as long; *~ so groß* twice the size; *~ soviel* twice as much, double the amount (*or* price etc.); F cl. *~ und dreifach sichern* make absolutely sure; F *es j-m ~ und dreifach heimzahlen* F pay s.o. back with a vengeance; F *~ gemoppelt* tautologous; → *nähen* I; 'Dop·pel·te **1.** *n* (-n; *no pl.*) double; twice as much (*or* many); *das ~ des Betrags* double the amount; **2.** F *m* (-n; -n) double whisky etc.; 'dop·pelt·koh·len·sau·er *adj.*: ⚗ *doppeltkohlensaures Natron* bicarbonate of soda

'Dop·pel|tür *f* double door(s *pl.*); ~ver·die·ner *m* **1.** double wage-earner; **2.** *pl.* dual-income couple *sg.*; ~ver·dienst *m* dual income; ~ver·ga·ser *m* dual carburet(t)or; ~ver·gla·sung *f* double glazing; ~vor·stel·lung *f* double bill; double feature; ~wäh·rung *f* ⚘ bimetallism; ~zei·lig [-tsaɪlɪç] *adv.*: *~ getippt* double-spaced; ~zim·mer *n* double room; twin-bedded room

'dop·pel·zün·gig [-tsʏŋɪç] *adj.* two-faced; ambiguous *remark etc.*; 'Dop·pel·zün·gig·keit *f* (-; -en) **1.** *no pl.* two-facedness; ambiguity; **2.** ambiguous remark

Dopp·ler·ef,fekt ['dɔplɐ-] *m phys.* Doppler effect

Dorf [dɔrf] *n* (-[e]s; Dörfer ['dœrfɐ]) village; *auf dem ~ wohnen* live in a village; *er stammt vom ~* he's from the country; *die Welt ist ein ~* it's a small world; *contp. das ist ja hier ein richtiges ~* this place is so provincial; ~be·woh·ner *m* villager

Dörf·chen ['dœrfçən] *n* (-s; -) little village; hamlet

'Dorf·ju·gend *f* young people (*or* youngsters) *pl.* in the village

dörf·lich ['dœrflɪç] *adj.* village *life etc.*; rustic

'Dorf|pfar·rer *m* country vicar; ~platz *m* village green; ~schen·ke *f*, ~wirts·haus *n* village inn

Dorn [dɔrn] *m* (-[e]s; -en) thorn (*a. fig.*); prickle, ♀ spine; *a. sport*: spike; tongue; ⚙ pin, bolt; *fig. er ist ihr ein ~ im Auge* he's a thorn in her side (*or* flesh); ~busch *m* thornbush; *bibl. der brennende ~* the burning bush

'Dor·nen|ge·strüpp ['dɔrnən-] *n* thornbushes *pl.*, brambles *pl.*; ~hecke (*sep.* -k·k-) *f* prickly hedge, hedge of thorns; ~kro·ne *f* crown of thorns; ~reich *fig. adj.*, ~voll *adj.* hard, difficult

'Dorn|fort·satz *m anat.* spinous process; ~hai *m* dogfish

dor·nig ['dɔrnɪç] *adj.* thorny (*a. fig.*), prickly

Dorn·rös·chen ['dɔrnrøːsçən] *n* (-s; *no pl.*) Sleeping Beauty; ~schlaf *m*: *im ~ liegen* be in (a state of) hibernation; *aus s-m ~ erwachen* come out of one's long hibernation

dör·ren ['dœrən] **I.** *v/t.* (h) dry, desiccate; kiln-dry; **II.** *v/i.* (sn) dry (up)

Dörr|fleisch ['dœr-] *n* dried meat; ~obst *n* dried fruit; ~pflau·me *f* prune

Dorsch [dɔrʃ] *m* (-[e]s; -e) cod, *Am. a.* codfish

dort [dɔrt] *adv.* there; *~ drüben* over there; *von ~* → ~'her *adv.*: *(von) ~* from there; ~'hin *adv.* **1.** there; **2.** that way; ~hin'auf *adv.* up there; ~hin'aus *adv.* out there; F *fig. bis ~* F incredibly ...; *bis ~ arbeiten* F work like crazy; ~hin'ein *adv.* in there; ~hin'un·ter *adv.* down there

dor·tig ['dɔrtɪç] *adj.*: *die ~en Verhältnisse* the conditions there

dort·zu·lan·de ['dɔrttsulandə] *adv.* there, in those parts

Do·se ['doːzə] *f* (-; -n) box; tin, can; ⚡ box

dö·sen ['døːzən] F *v/i.* (h) doze; *(vor sich hin) ~* daydream; *ein bißchen ~* have a little doze

'Do·sen|bier *n* canned beer; ~fleisch *n*, ~milch *f*, ~öff·ner *m* → *Büchsenfleisch etc.*

do·sie·ren [do'ziːrən] *v/t.* (h) measure out; *fig.* mete out, dispense; *richtig ~ pharm.* give (*or* take) the right dose of; Do'sie·rung *f* (-; -en) dosage, dose

dö·sig ['døːzɪç] F *adj.* **1.** dozy, sleepy; **2.** F dop(e)y

Do·sis ['doːzɪs] *f* (-; Dosen ['doːzən]) dose (*a. fig.*), dosage; *fig.* touch, dash

Dos·sier [dɔ'sjeː] *n* (-s; -s) file

do·tiert [do'tiːrt] *adj.*: *gut ~ sein* be well paid; *die Stellung ist mit 5000 Mark ~* the monthly salary for the post is 5000 marks; *das Turnier ist mit 300 000 Mark ~* the total prize money for the tournament is 300 000 marks; *die Auszeichnung ist mit 25 000 Mark ~* the award includes prize money of 25 000 marks

Dot·ter ['dɔtɐ] *m*, *n* (-s; -) (egg) yolk; ~blu·me *f* marsh marigold; ~gelb *adj.* deep yellow

dou·beln ['duːbəln] *v/t.* (h): *j-n ~ film*: be (*or* act as) s.o.'s stuntman *or* stuntwoman (*or* double); *er mußte in dieser Szene gedoubelt werden* they had to bring in a stuntman (*or* double) for that scene; Dou·ble ['duːbəl] *n* (-s; -s) **1.** *film*: stuntman, stuntwoman, double; **2.** ♪ double; **3.** double, lookalike; **4.** *sport*: double; *das ~ schaffen* do the double

Dou·blet·te *f* → *Dublette*

Do·zent [do'tsɛnt] *m* (-en; -en) (university) lecturer; *Am.* assistant professor; do·zie·ren [do'tsiːrən] *v/i.* (h) lecture (über